



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

SW

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------------------------------------|-------------|----------------------|---------------------------------|------------------|
| 10/784,330 | 02/23/2004 | Anthony DiLeo | MCA-633 US | 8718 |
| 25182 | 7590 | 12/08/2004 | | |
| MILLIPORE CORPORATION 290 CONCORD ROAD BILLERICA, MA 01821 | | | | |
| | | | EXAMINER BUECHNER, PATRICK M | |
| | | | ART UNIT 3754 | PAPER NUMBER |

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/784,330

Applicant(s)

DILEO, ANTHONY

Examiner

Patrick M Buechner

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/23/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, Species I in the reply filed on 9/15/04 is acknowledged. The traversal is on the ground(s) that the claims can be examined without serious burden. This is not found persuasive because it is a conclusionary statement without supporting evidence.

The requirement is still deemed proper and is therefore made FINAL.

2. Applicant stated, in the reply filed on 9/15/04, that claims 1-3 and 5-6 read on the elected species, however it is claims 1, 2 and 4-6 that actually read on the elected species.

Therefore claims 3 and 7-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species or invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 9/15/04.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keyes et al. (US 5,680,960) in view of Cohen et al. (US 5,135,485) and further in view of Sudolcan et al. (US 6,299,020).

Keyes clearly discloses all of the structure of claims 1, 2, 4 and 6 with the exception of a pair of copper electroconductive terminals proximate the fill tube and control means responsive to the capacitance of the conductors for controlling the filling or release of fluid from the reservoir. Keyes does disclose a pair of optical terminals and a control means responsive to the optical terminals for controlling the filling or release of fluid from the reservoir.

Cohen teaches a fluid level sensing system having a pair of electroconductive terminals placed directly on the container. While Cohen is silent as to the material the electroconductive terminals are made from, examiner takes Official Notice that copper is a well known conductor and malleable material and that one having ordinary skill in the art at the time the invention was made would have found that it would have been obvious to use copper for the electroconductive terminals because of copper's high conductivity and high malleability.

It also would have been obvious for one of ordinary skill in the art at the time the invention was made to use the detection system of Cohen in the apparatus of Keyes as a simple substitution of parts, that is to replace the optical sensors of Keyes with the electroconductive terminals as taught by Cohen, since Sudolcan recognizes that optical sensors can have deficiencies when the material to be dispensed is less opaque, and that electroconductive terminals are more reliable for these types of materials.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keyes in view of Cohen and in view of Sudolcan as applied to claim 1 above, and further in view of Freund (US 4,262,542).

Keyes in view of Cohen and in view of Sudolcan disclose all the limitations of claim 5, as discussed above in 4, with the exception of using pulsed current.

Freund teaches an electroconductive flow meter using pulsed current.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use pulsed current, as taught by Freund, in the apparatus of Keyes as modified by Cohen and Sudolcan. Using pulsed current would allow for nearly constant electrode output for a given set of fluid level conditions.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick M Buechner whose telephone number is (571) 272-4923. The examiner can normally be reached on 6:30am-5:00pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (571) 272-4906. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PB
PB

Michael Mar
MICHAEL MAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700